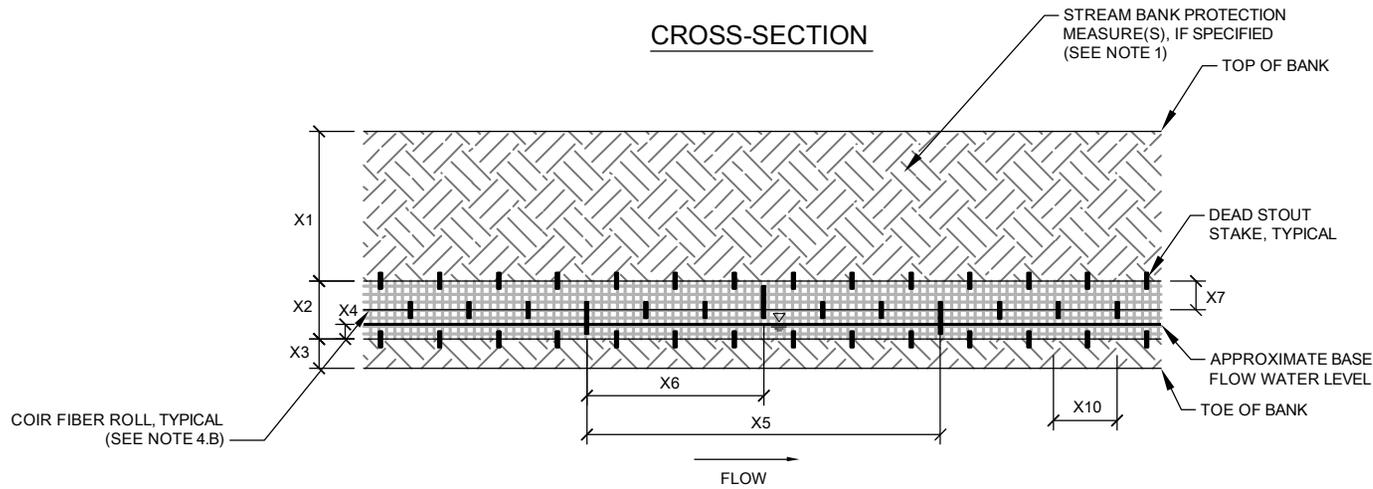


CROSS-SECTION



PLAN VIEW
(SEE NOTE 5)

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE. THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

NOT TO SCALE

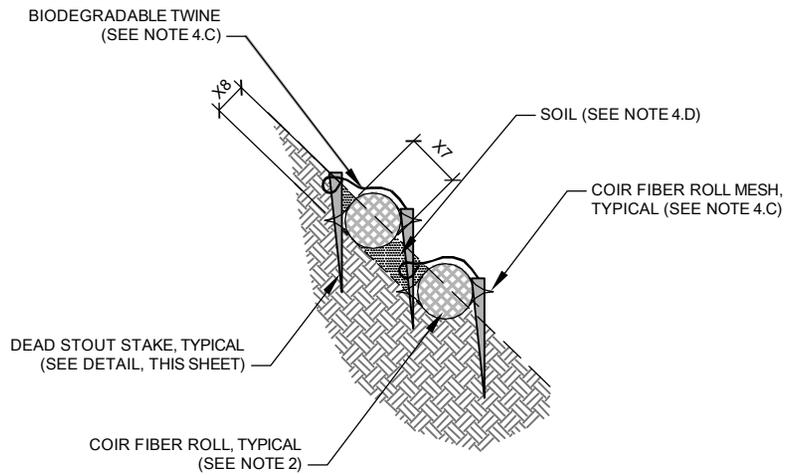


CHARLOTTE-MECKLENBURG
STORM WATER SERVICES
GENERIC DETAIL REQUIREMENTS

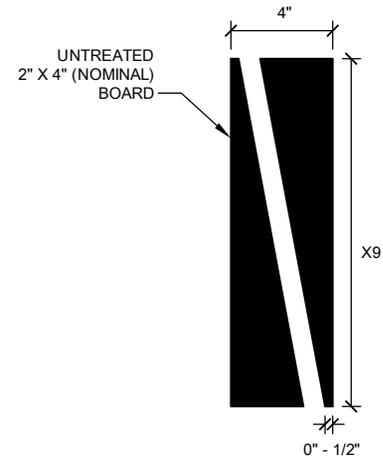
COIR FIBER ROLL TOE PROTECTION

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER	
1 OF 2	
REV. DATE	REV. #



COIR FIBER TOE PROTECTION DETAIL



DEAD STOUT STAKE DETAIL

NOTES:

1. COIR FIBER ROLL TOE PROTECTION MAY BE USED ALONE OR IN COMBINATION WITH ANOTHER STREAM BANK PROTECTION MEASURE. IF USED IN COMBINATION WITH ANOTHER MEASURE, INFORMATION REGARDING THE OTHER MEASURE(S) SHALL BE ADDED TO THE COIR FIBER ROLL TOE PROTECTION DETAIL OR DETAILED SEPARATELY AND REFERENCED HEREIN.
2. COIR FIBER ROLL TOE PROTECTION SHALL CONSIST OF ONE OR MORE ROWS OF A MANUFACTURED, COIR, ROLL-SHAPED PRODUCT INSTALLED LENGTH-WISE AND STAKED AGAINST THE STREAM BANK IN THE TOE OF BANK AREA. COIR FIBER ROLLS SHALL BE OF A MATERIAL AND SIZE (LENGTH AND DIAMETER) SPECIFIED BY THE DESIGNER.
3. COIR FIBER ROLLS SHALL BE PLACED IN DIRECT CONTACT WITH THE SOIL ALONG THEIR ENTIRE LENGTH; ROLLS SHALL NOT BRIDGE OVER ANY VOIDS OR NATURAL OBSTACLES SUCH AS STUMPS OR ROCK.
4. COIR FIBER ROLL TOE PROTECTION SHALL BE INSTALLED GENERALLY AS FOLLOWS:
 - a. A TRENCH SHALL BE EXCAVATED ON THE STREAM BANK TOE IN THE LOCATION SHOWN PRIOR TO PLACEMENT OF ONE OR MORE ROWS OF COIR FIBER ROLLS.
 - b. MULTIPLE ROWS OF COIR FIBER ROLLS SHALL BE INSTALLED IN A LONGITUDINALLY STAGGERED PATTERN.
 - c. DEAD STOUT STAKES SHALL BE INSTALLED AT THE DESIGNATED SPACING THROUGH THE OUTER MESH OF THE COIR FIBER ROLL TO SECURE THE ROLLS TO THE STREAM BANK. ADDITIONALLY, A BIODEGRADABLE TWINE MAY BE USED TO SECURE THE COIR FIBER ROLLS TO THE DEAD STOUT STAKES.
 - d. SOIL SHALL BE PLACED AND LIGHTLY COMPACTED AS NECESSARY TO FILL ANY VOIDS AROUND AND/OR BETWEEN THE COIR FIBER ROLLS. IF PLANTS ARE TO BE INSTALLED AROUND AND/OR BETWEEN THE COIR FIBER ROLLS, SOIL AMENDMENTS, AS SPECIFIED BY THE DESIGNER, MAY BE ADDED TO THE SOIL PRIOR TO PLACEMENT.
5. THE PLAN VIEW ILLUSTRATES A PERPENDICULAR PERSPECTIVE OF EACH SURFACE DEPICTED IN THE CROSS SECTION. THERE IS NO FORESHORTENING OF THE STREAM BANK (OR ANY OTHER SLOPED SURFACE) IN THE PLAN VIEW.

DIMENSIONS (VALUES TO BE PROVIDED BY DESIGNER)			
VARIABLE	VALUES	TYPICAL UNITS	DESCRIPTION
X1		FT. OR IN.	COIR FIBER ROLL TOE PROTECTION PLACEMENT FROM TOP OF BANK
X2		FT. OR IN.	COIR FIBER ROLL TOE OF BANK PROTECTION HEIGHT
X3		FT. OR IN.	COIR FIBER ROLL TOE PROTECTION PLACEMENT FROM TOE OF BANK
X4		FT. OR IN.	COIR FIBER ROLL TOE PROTECTION RELATIONSHIP TO APPROXIMATE BASE FLOW WATER LEVEL
X5		FT.	LENGTH OF COIR FIBER ROLL
X6		FT. OR IN.	OVERLAP OF COIR FIBER ROLLS, IF MULTIPLE ROLLS SPECIFIED
X7		IN.	COIR FIBER ROLL DIAMETER
X8		IN.	COIR FIBER ROLL DEPTH OF PLACEMENT INTO STREAM BANK
X9		IN.	DEAD STOUT STAKE LENGTH
X10		FT. OR IN.	DEAD STOUT STAKE SPACING

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE. THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

NOT TO SCALE



**CHARLOTTE-MECKLENBURG
STORM WATER SERVICES
GENERIC DETAIL REQUIREMENTS**

COIR FIBER ROLL TOE PROTECTION

DRAFT - NOT TO BE USED FOR CONSTRUCTION

SHEET NUMBER	
2 OF 2	
REV. DATE	REV. #